

Parabola WS Key

1. $V(4,2)$ D: $y = -3$
 $F(4,7)$

2. D: $y = 2$ $V(2,4)$
 $F(2,6)$

3. $V(0,2)$ $F(0,0)$
 $D: y = 4$

4. $F(-3,-1)$ $V(+1,-1)$
 $D: x = 5$

5. $F(1,-2)$ $V(1,-5)$
 $D: y = -8$

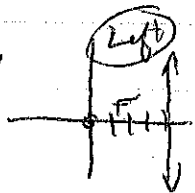
6. D: $x = -2$ $F(2,0)$
 $V(0,0)$

Equations $y = a(x-h)^2 + k$
 7. $F(0,0)$ D: $y = 4$

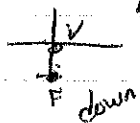
$V(0,2)$
 $\frac{1}{4a} = 2$
 $a = \frac{1}{8}$
 $y = -\frac{1}{8}x^2 + 2$

$x = a(y-k)^2 + h$
 8. $F(0,0)$ D: $x = 4$

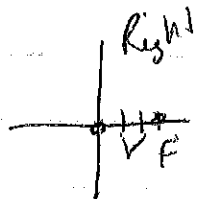
$V(2,0)$
 $\frac{1}{4a} = 2$ $a = \frac{1}{8}$
 $x = -\frac{1}{8}y^2 + 2$



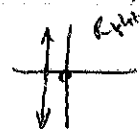
9. $V(0,0)$ $F(0,-4)$
 $\frac{1}{4a} = 4$ $a = \frac{1}{16}$
 $y = -\frac{1}{16}x^2$



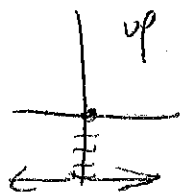
10. $V(0,0)$ $F(3,0)$
 $\frac{1}{4a} = 3$ $a = \frac{1}{12}$
 $x = \frac{1}{12}y^2$




11. $V(0,0)$ D: $x = -1$
 $\frac{1}{4a} = 1$ $a = \frac{1}{4}$
 $x = \frac{1}{4}y^2$



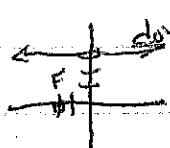
12. $V(0,0)$ D: $y = -4$
 $\frac{1}{4a} = 4$ $a = \frac{1}{16}$
 $y = \frac{1}{16}x^2$



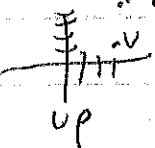
13. $F(0,2)$ $O: x=2$

 $V(1,2)$
 $\frac{1}{4a} = 1$
 $a = \frac{1}{4}$

$$x = -\frac{1}{4}(y-2)^2 + 1$$

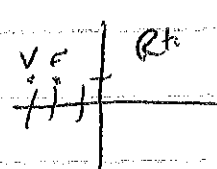
LR = 4
 work on graph paper

14. $F(-2,0)$ $O: y=3$

 $V(-2, \frac{3}{2})$
 $\frac{1}{4a} = \frac{3}{2}$
 $12a = 2$
 $a = \frac{1}{6}$

$$y = -\frac{1}{6}(x+2)^2 + \frac{3}{2}$$

15. $F(3,4)$ $V(3,2)$

 $\frac{1}{4a} = 2$ $a = \frac{1}{8}$

$$y = \frac{1}{8}(x-3)^2 + 2$$

16. $F(-2,1)$ $V(-3,1)$

 $\frac{1}{4a} = 1$
 $a = \frac{1}{4}$

$$x = \frac{1}{4}(y-1)^2 - 3$$

B.

$$F(0,2)$$

$$x=2$$

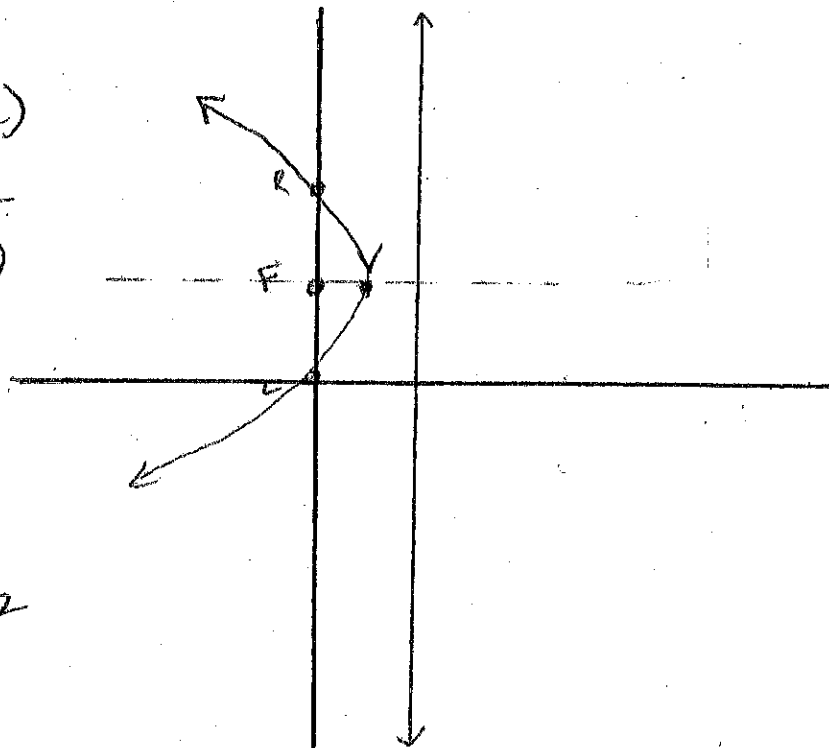
$$V(1,2)$$

$$LR=4$$

$$L(4,0)$$

$$R(0,4)$$

$$a03 y=2$$



14/ $F(-2,0)$

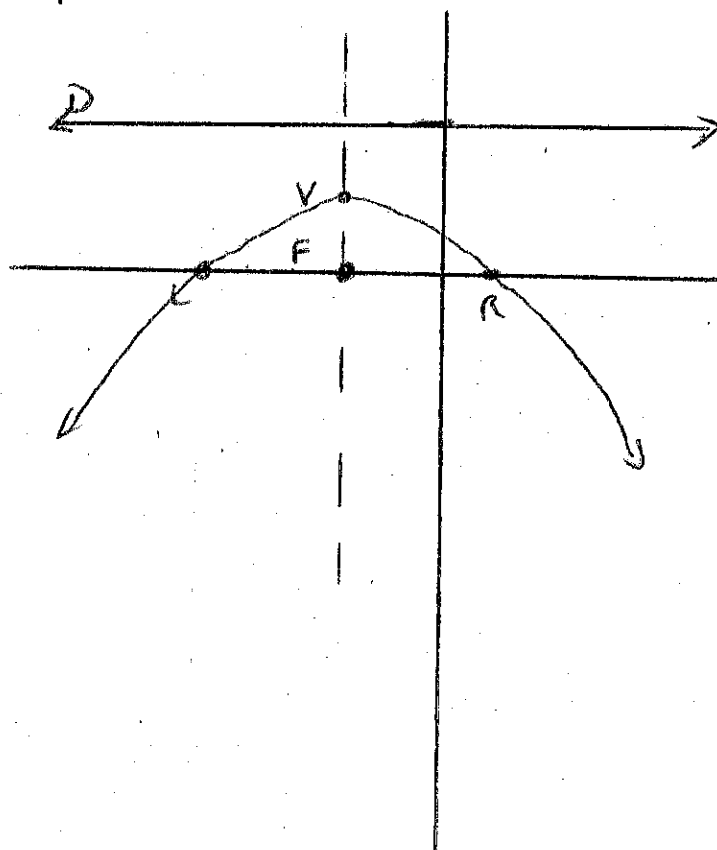
$$D: y=3$$

$$V(-2, \frac{3}{2})$$

$$LR=6$$

$$L(-5,0) R(1,0)$$

$$a03 x=-2$$



15. $F(3, 4)$

$V(3, 2)$

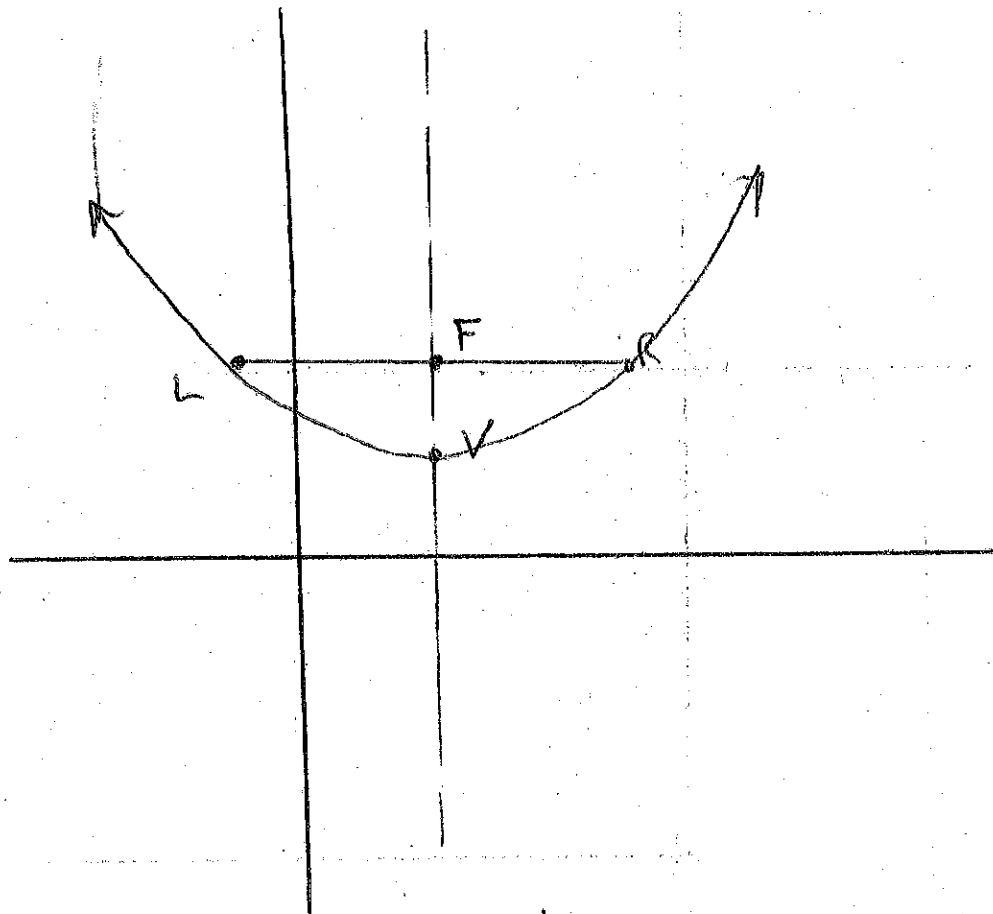
$D: y = 0$

a.o.s. $x = 3$

$LR = 8$

$L(-1, 4)$

$R(7, 4)$



16. $F(-2, 1)$

$V(-3, 1)$

$D: x = -4$

a.o.s. $y = 1$

$LR = 4$

$L(-2, 3)$

$R(-2, -1)$

